



Abstract

Standard Operating Procedure (SOP)-driven Digital Network Architecture monitors, tracks laboratory routines and creates electronic records. The invention enables laboratory scientists to design, manage, control, and reproduce laboratory routines. The invention creates electronic system to identify where, who and when the quality deteriorates in laboratories. SOPs mean instructions of which texts for scientists and directives for computers. Methods include two mutual computer-aided processes - SOP management and laboratory routine. Both processes start with user authentication, security group, security access to SOPs and laboratory routine. Further SOP management that may not be subsequent is defining and refining contents of SOPs; version control, retirement and assignment of SOP to specimens. Further laboratory routine that must be subsequent include assigning SOPs to checked-in specimen, chain of custody; test results based upon SOPs; repeating the steps according to SOPs and forming chain of custody, test results; case approval and closing the case.